

PATENT SPECIFICATION

(11) 1 289 921

DRAWINGS ATTACHED

- (21) Application No. 8704/70 (22) Filed 24 Feb. 1970
 (31) Convention Application No. P 19 11 401.3
 (32) Filed 6 March 1969
 (31) Convention Application No. P 19 33 992.5
 (32) Filed 4 July 1969 in
 (33) Germany (DT)
 (45) Complete Specification published 20 Sept. 1972
 (51) International Classification H05B 3/20, 3/44
 (52) Index at acceptance
 B5N 177 17Y 20Y 214 227 22Y 241 336 344 348 350
 35X 54X 55Y 567 569 57X 625 653 659 715
 71X 790
 (72) Inventor WILHELM BRAML



NATIONAL REFERENCE
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AND INVENTION

(54) FLOOR COVERING

(71) I, HELMUT SALLINGER, a German Citizen, of 35 Hopfenweg, 8908 Krumbach, Germany, do hereby declare the invention for which we pray that a patent may be granted to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention concerns a floor covering having a base layer (i.e. a layer intended to be laid in contact with a floor) and a textile layer upon the base layer.

Various textile floor coverings, in tile or sheet form, have base layers or coatings to which the textile material is secured, the base layer or coating usually being a continuous coating of synthetic plastics material. Such a continuous coating has the effect of rendering the floor covering impervious both to water and to gases and vapours. Because of this impermeability, the floor covering can be applied only on substrates which have completely dried out. However, certain substrates, more especially concrete floors, require several weeks after laying or installation before they are completely dried out. This involves a considerable delay before the floor covering can be fitted.

An object of the invention is to provide a textile floor covering which can be installed on substrates which are not dried out or are only partially dried out. With this object in view the present invention provides a floor covering having a base layer and a textile layer upon the base layer wherein the base layer consists of rotproof insulating fibres and is connected to the textile layer by a resin acid ester adhesive applied in strip form to leave openings between the strips.

Such a floor covering has the advantage that moisture in a substrate on which it is laid can evaporate or permeate through the openings in

the base layer and the textile layer disposed thereabove. In addition to this, the base layer, being of an insulating nature, assures that the floor covering achieves good footfall sound attenuation. Moisture permeating through the floor covering does not cause deterioration of the base layer, since it is rotproof.

The openings can be arranged regularly or irregularly over the base layer.

The base layer of the floor covering of the invention may, if desired, consist of synthetic fibres. Since it then does not contain any natural substances, the base layer constitutes an insulating layer which is rotproof and is not water absorptive, and which is, in addition, pervious.

The thickness of the resin acid ester adhesive can vary, so that with a thick adhesive layer a heavy-weight floor covering is achieved.

A glass fibre fabric is advantageously interposed between the textile layer and the base layer, in order to ensure good dimensional stability of the floor covering.

A needled fleece of curled polypropylene fibres can be used as the textile layer, although such textile layer may also consist of other synthetic fibres, which may be woven or knitted.

The base layer consists preferably of a needled felt made of polyester fibres.

The resin acid ester adhesive may, for example be the material which is available commercially under the Trade name of "Resimelt".

The floor covering of the invention has the advantage that, when it is fitted over a substrate, the base layer thereof will not become stuck firmly to the substrate, even in the event of prolonged loading or prolonged wear, for example by wheel chairs passing thereover.

The invention will be described further, by way of example, with reference to the accompanying drawing, in which the single figure is an enlarged fragmentary cross section illustrating a preferred embodiment of floor covering of the invention.

5 The illustrated embodiment has a layer 11 of textile material which is secured to a base layer 14 which is an insulating layer. Anchoring of the textile layer 11 to the insulating base layer 14 is achieved by a resin acid ester adhesive.

10 The textile layer 11 is in the form of a needled fleece of curled polypropylene fibres, and between the latter and the base layer 14 is a glass fibre fabric layer 12. Applied thereto are strips 13 of the resin acid ester adhesive which, in turn, are followed by the base layer 14 which is of synthetic fibre in the form of a needle felt made of polyester fibres. The application of the resin acid ester adhesive 13 to the textile layer 11, which is reinforced by the glass fibre fabric layer 12, is effected in the heated state, so that the adhesive is fluid, whereupon the synthetic fibre layer 14 is applied directly thereto so that the resin acid ester adhesive acts, after cooling, to provide firm anchorage between the textile layer 11 and the synthetic fibre base layer 14. Although the figure shows sharp boundaries of the strips of resin acid ester, the latter actually penetrates somewhat into the textile layer 11 reinforced with the glass fibre fabric 12 and into the synthetic fibre base layer 14.

35 Any moisture which may be present at the underside of the floor covering when it is laid

on a substrate which has not dried out can pass through the floor covering through the openings which occur between the adhesive strips 13.

WHAT I CLAIM IS:—

1. A floor covering having a base layer and a textile layer upon the base layer wherein the base layer consists of rotproof insulating fibres and is connected to the textile layer by a resin acid ester adhesive applied in strip form to leave openings between the strips.

2. A floor covering as claimed in Claim 1 characterised in that the base layer consists of synthetic fibres.

3. A floor covering as claimed in Claim 3, characterised in that a glass fibre fabric is interposed between the textile layer and the base layer.

4. A floor covering as claimed in Claim 2 or 3, characterised in that the textile layer is a needled fleece of curled polypropylene fibres.

5. A floor covering as claimed in Claim 2, Claim 3 or Claim 4 characterised in that the base layer is a needled felt made of polyester fibres.

6. A floor covering substantially as hereinbefore described with reference to and as illustrated in the accompanying drawing.

For the Applicant,
BARLOW, GILLET & PERCIVAL,
Chartered Patent Agents,
94 Market Street, Manchester, 1,
and
20 Tooks Court, Cursitor Street,
London, E.C.4.

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COMPLETE SPECIFICATION

1 SHEET

This drawing is a reproduction of
the Original on a reduced scale

